WHAT IS CLAIMED IS:

1. A device for measuring a varus rotation angle in a knee of a leg, comprising:

a femoral reference member positionable in a reference position against the leg on a medial side of the knee;

a first arm having a first end hingedly engaged to the femoral reference member and extending from the femoral reference member toward a tibial portion of the leg when the femoral reference member is positioned in the reference position;

a second arm having a first end hingedly engaged to a second end of the first arm and extending from the first arm away from the knee when the femoral reference member is positioned in the reference position, the second member fastenable to the leg so that the second arm remains in a substantially fixed relationship with the tibial portion of the leg;

a first measuring device that measures a first displacement angle of the first arm in relation to the femoral reference member, the first displacement angle measurable when a load is applied to the tibial portion of the leg; and

a second measurement device that measures a second displacement angle of the second arm in relation to the first arm, the second displacement angle measurable when the load is applied to the tibial portion of the leg,

wherein the varus rotation angle is determinable from the first and second displacement angles.

2. The device of claim 1, wherein the varus rotation is determinable from the first and second displacement angles while displacements of the first and second arms account for a medial-lateral translation of a tibia in the knee.

3. The device of claim 1, wherein a joint-space opening is determinable from the first and second displacement angles the first and second measurement devices.

4. The device of claim 1, wherein the combined length of the femoral reference member, the first arm, and the second arm is less than 24 inches.

5. The device of claim 4, wherein the combined length of the femoral reference member, the first arm, and the second arm is less than 18 inches.

6. The device of claim 1, wherein the femoral reference member is positionable in the reference position against the leg on a medial femoral epicondyle of the knee.

7. The device of claim 6, further comprising a contact pad on a femoral reference member positionable on the medial femoral epicondyle.

8. The device of claim 1, wherein the second arm is fastenable to the tibial portion of the leg such that the second arm is positioned medially of the leg and in a substantially fixed relationship to the tibial portion.

9. The device of claim 8, further comprising one or more attachment devices connected to the second arm, each attachment device having a strap operable to fasten the second arm to the tibial portion of the leg.

10. The device of claim 9, further comprising a partial cast positioned between each strap and the tibial portion of the leg to maintain the second reference arm in a substantially fixed relationship to the tibial portion.

11. The device of claim 1, wherein the first and second measurement devices are potentiometers.

12. A system for measuring displacement of a tibia in a knee of a leg, comprising:

a device for measuring a varus rotation angle, comprising:

a femoral reference member positionable in a reference position against the leg on a medial side of the knee;

a first arm hingedly engaged to the femoral reference member and extending from the femoral reference member toward a tibial portion of the leg when the femoral reference member is positioned in the reference position;

a second arm hingedly engaged to the first arm and extending from the first arm away from the knee when the femoral reference member is positioned in the reference position, the second member fastenable to the leg so that the second arm remains in a substantially fixed relationship with the tibial portion of the leg;

a first measuring device that measures a first displacement angle of the first arm in relation to the femoral reference member; and

a second measurement device that measures a second displacement angle of the second arm in relation to the first arm,

wherein the varus rotation angle is determinable from the first and second displacement angles;

a computing device operable to receive outputs of the first and second measuring devices and to compute the varus rotation angle from the first and second displacement angles; and

a display electrically connected to the computing device to show the varus rotational angle in real-time.

13. The system of claim 12, wherein the display is operable to show a real-time graph of the varus rotation angle versus time.

14. The system of claim 12, wherein the computing device operable to compute a joint-space opening value from the first and second displacement angles and the display is operable to show the joint-space opening value.

15. The system of claim 12, wherein the device for measuring varus rotation angle further comprises a load measuring device connected to the second arm such that the load measuring device is operable to output a measurement of load applied to the second arm.

16. The system of claim 15, wherein the display is operable to show a real-time graph of the measurement of load versus time.

17. The system of claim 12, wherein the device for measuring varus rotation angle further comprises a start button near a handle portion on the femoral reference member.

18. The system of claim 17, wherein the computing device is operable to receive signals from the first and second measurement devices when the start button is engaged.

19. A method of measuring displacement of a tibia in a knee of a leg, comprising:

attaching a knee laxity measuring device to a tibial portion of the leg such that the knee laxity measuring device is positioned medially of the knee, wherein the knee laxity measuring device includes:

a femoral reference member positionable in a reference position against the leg on a medial side of the knee;

a first arm hingedly engaged to the femoral reference member and extending from the femoral reference member toward the tibial portion of the leg when the femoral reference member is positioned in the reference position;

a second arm hingedly engaged to the first arm and extending from the first arm away from the knee when the femoral reference member is positioned in the reference position, the second member fastenable to the leg so that the second arm remains in a substantially fixed relationship with the tibial portion of the leg;

a first measuring device that measures a first displacement angle of the first arm in relation to the femoral reference member; and

a second measurement device that measures a second displacement angle of the second arm in relation to the first arm;

applying a force in the medial direction to the second arm while the femoral reference member substantially restrains movement of the knee; and

determining the varus rotation angle from the first and second displacement angles.

20. The method of claim 19, wherein the second arm is operable to be attached to the tibial portion such that the second arm is positioned medially of the leg and in a substantially fixed relationship to the tibial portion.

21. The method of claim 20, wherein the knee laxity measuring device further comprises one or more attachment devices connected to the second arm, each attachment device having a strap operable to fasten the second arm to the tibial portion of a leg.

22. The method of claim 19, further comprising determining the varus rotation angle from the first and second displacement angles while displacements of the first and second arms account for a medial-lateral translation of the tibia in the knee.

23. The method of claim 22, wherein the varus rotation angle is determined from the first and second displacement angles without an error-causing effect from a change in center of rotation the tibia.

24. The method of claim 19, further comprising determining a joint-space opening from the first and second displacement angles.